

APPARATUS USING A LENGTHENED EQUALIZATION TARGET FILTER WITH A MATCHED FILTER METRIC IN A VITERBI DETECTOR

ABSTRACT

5 An apparatus that uses a lengthened equalization target filter with a matched filter
metric in a Viterbi detector is disclosed. The equalization target includes a base partial
response component, i.e., $(1-D^2)$, a fractional coefficient polynomial component to
whiten the noise, i.e., $(1+p_1D+p_2D^2)$, and a time-reversed replica of the noise-whitening
component. Thus, the time-reversed replica of the noise-whitening component comes
10 from what was formerly a matched filter component.